#### STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0101907; Al 9928; PER20070001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS:

Allen Correctional Center

Allen Correctional Center Wastewater Treatment Plant

3751 Lauderdale Woodyard Road

Kinder, LA 70648

II. PREPARED BY:

Angela Marse

**DATE PREPARED:** 

June 9, 2008

III. PERMIT ACTION:

reissue LPDES permit <u>LA0101907</u>, Al <u>9928</u>; <u>PER20070001</u>

LPDES application received: August 9, 2007

LPDES permit issued:

March 1, 2003

LPDES permit expired:

February 29, 2008

#### IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving Allen Correctional Center.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 3751 Lauderdale Woodyard Road in Kinder, Allen Parish.
- D. The treatment facility consists of a three cell agarated lagoon. Stablized water passes through two traveling bridge filters. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location:

Latitude 30° 33' 28" North

Longitude 92° 47' 37" West

Description:

treated sanitary wastewater

**Design Capacity:** 

0. 32 MGD

Type of Flow Measurement which the facility is currently using: Totalizing Meter

# V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into the Calcasieu River in segment 030103 of the Calcasieu River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

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The designated uses and degree of support for Segment 030103 of the Calcasieu River Basin are as indicated in the table below  $^{1/2}$ :

Overall Degree of Support for Segment 030103	Degree of Su	upport of Each	ı Use				
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	Full	N/A	N/A	Full

<sup>&</sup>lt;sup>17</sup>The designated uses and degree of support for Segment 030103 of the Calcasieu River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 030103 of the Calcasieu River Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury and lead.

# Mercury

The source of mercury has been identified as atmospheric deposition. Since the discharge is not directly into a mercury impaired waterbody and the treatment plant serves only the correctional facility, no limit or mercury prevention program plan has been included in the draft permit. A TMDL will be done for mercury. Should the TMDL determine a mercury effluent limitation is necessary; a reopener clause has been included in the draft permit.

#### Lead

The Calcasieu River TMDL for Dissolved Lead (2001) was developed to address dissolved lead in the Calcasieu River. It applies to Subsegment 030103 as well as 030101 and 030102. The wasteload allocation was determined to be zero since there are no known point sources discharging lead in these subsegments. Therefore, an effluent limit for lead is not required in the proposed permit.

## VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 030103 of the Calcasieu River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

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#### VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

# VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

#### IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

**OUTFALL 001** 

No TMDL Studies have been conducted since issuance of the previous permit. The facility has not been modified either. Therefore, the proposed permit will contain the same effluent limits as the previous permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD₅	27	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent . Limitations Policy (SSELP) for facilities of this size and type.
TSS	40	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Oil and Grease		***	15 mg/l	Limits are placed in the permit because of on-site food service for inmates and facility personnel

<sup>\*</sup>Concentration limits are used in accordance with LAC 33:1X.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:1X.709.B references LAC 33:1X.711 which express BOD₅ and TSS in terms of concentration.

## Other Effluent Limitations:

## 1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

#### 2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

## 3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:\text{X.1113.B.7.}

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# X. PREVIOUS PERMITS:

LPDES Permit No. LA0101907:

Issued:

March 1, 2003

Expired:

February 29, 2008

Effluent Characteristic	Discharge L	<u>imitations</u>	Monitoring Requ	irements
	Daily Avg.	Daily Max.	Measurement	Sample
			Frequency	Type
Flow	Report	Report	Continuous	Recorder
BOD₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Oil and grease		15 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.

The permit contains pretreatment language.

# XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

### A) Inspections

A review of the files indicates the following most recent inspection was performed for this facility.

Date: December 27, 2007 Inspector: Kevin Natali Findings and/or Violations:

- 1. A records review indicated no violations or areas of concern.
- 2. A facility site tour was conducted. The treatment unit consists of an aerated three cell oxidation pond followed by two traveling sand bridge filters and chlorine disinfection. The primary flow device is a three feet rectangular weir. The secondary flow recorder is a Vantage 2210, which was last calibrated December 18, 2007. The effluent was gray in color. No areas of concern were noted on the facility tour.

## B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility.

# C) DMR Review

A review of the discharge monitoring reports for the period beginning April, 2006 through December, 2007 has revealed no violations. (See attached DMR review.)

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## XII. ADDITIONAL INFORMATION:

In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The LDEQ and USEPA will be conducting TMDLs in the Calcasieu River Basin Subsegment 030103. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.32 MGD.

Effluent loadings are calculated using the following example:

BOD:  $8.34 \text{ lb/gal} \times 0.32 \text{ MGD} \times 10 \text{ mg/l} = 27 \text{ lb/day}$ 

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

#### Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit.

#### **Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report <u>each year</u> for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date	
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date	

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#### XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

## XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2008.

<u>Low-Flow Characteristics of Louisiana Streams</u>, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, The GEO Group, Inc., Allen Correctional Center Wastewater Treatment Pla, August 9, 2007.

GEO Group, Inc/Allen Correctional Center Al9928/LA0101907

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DATE	avq	max	avg	max	avg	max	avg ma	max	min	max	max
	ĭ	report	10 mg/l	15 mg/l	15 mg/l	23 mg/l	200	400	6.0	9.0	15 mg/l
Apr-06	0.188	0.284		3	8		8 < 10	<10	6.4	6.75	-2
May-06	0.188	0.233	3	3	4		4 < 10	<10	6.25	6.45 <2	2
90-un	0.199	0.231	2	2	<3	۵	<10	<10	6.27	6.28	ω
90-InC	0.24	0.321	2	2	10		13 <10	<10	6.4	6.47	2
Aug-06	0.259	0 302	3	3	10	1	1]<10	<10	6.36	7.09	2
Sep-06		0.216	4	4	8		13 < 10	<10	6.3	6.91	-2
Oct-06		0.51	2	2	6		8 17	30	6.26	6.46	2
Nov-06		0.506	2	2	13		18 <10	<10	6.09	6.26	2
Dec-06	0.164	0.201	3	3	11	1	13 <10	<10	6.18	6.26 <2	12
Jan-07		0.25	<2	<2	8		8 < 10	<10	6.12	7.12 <2	2
Feb-07	0.127	0.152	5	2	4		5 <10	<10	6.18	6.23 <2	
Mar-07	0.135	0.143	4	5	6		6 < 10	<10	6.06	6.15	6
Apr-07		0.179	3	ယ			8.<10	<10	6.08	6.35	2
May-07	0.157	0.218		4	6		8 <10	<10	6.22	6.24	ω
70-07		0.236	5	7	Δ	۵	<10	<10	6.48	6,52	4
Jul-07	0.231	0.296	9	10	5		7 <10	<10	6.28	6.39 < 1.4	<b>1.4</b>
Aug-07	0.214	0.27	8	12	5		6 < 10	<10	6.31	6.5	<1.4
Sep-07	0.18	0.212	3	ω	۵	۵	14		6.3	6.49 < 1.4	<u> </u>
Oct-07	0.14	0.181	3	3	5		7 <10	<10	6.17	6.3	<1.4
Nov-07	)	0.191	2	2			8 < 10	<10	6.28		2
Dec-07	0.193	0.293	ω ω	ω	3		3 < 10	<del>10</del>	6.15	6.54	<1.4

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